



Atty. Dkt. No. 041673-2048

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant: Corbeil, et al.

Title: VACCINE BASED ON  
ATTENUATED HAEMOPHILUS  
SOMNUS

Appl. No.: 09/787,964

Filing Date: 09/25/1999

Examiner: Albert Mark Navarro

Art Unit: 1645

**CERTIFICATE OF MAILING**

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as First Class Mail in an envelope addressed to: Commissioner for Patents, PO Box 1450, Alexandria, Virginia 22313-1450, on the date below.

Michelle Sympson

(Printed Name)

*Michelle Sympson*

(Signature)

September 10, 2003

(Date of Deposit)

**INFORMATION DISCLOSURE STATEMENT**  
**UNDER 37 CFR §1.56**

Commissioner for Patents  
PO Box 1450  
Alexandria, Virginia 22313-1450

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Sir:

Submitted herewith on Form PTO/SB/08 is a listing of documents known to Applicants in order to comply with Applicants' duty of disclosure pursuant to 37 CFR §1.56. A copy of each listed document is being submitted to comply with the provisions of 37 CFR §1.97 and §1.98.

The submission of any document herewith, which is not a statutory bar, is not intended as an admission that such document constitutes prior art against the claims of the present application or that such document is considered material to patentability as defined in 37 CFR §1.56(b). Applicants do not waive any rights to take any action which would be appropriate to antedate or otherwise remove as a competent reference any document which is determined to be a *prima facie* art reference against the claims of the present application.

**TIMING OF THE DISCLOSURE**

The listed documents are being submitted in compliance with 37 CFR §1.97(b), before the mailing date of the first Office Action after the filing of a request for continued examination application under §1.114.

**RELEVANCE OF EACH DOCUMENT**

All of the documents are in English.

Applicants respectfully request that any listed document be considered by the Examiner and be made of record in the present application and that an initialed copy of Form PTO/SB/08 be returned in accordance with MPEP §609.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 CFR §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 50-0872. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 50-0872.

Respectfully submitted,

Date

9-16-03  
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Substitute for form 1449B/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 1 of 3

**Complete if Known**

Application Number	09/787,964
Filing Date	09/25/1999
First Named Inventor	Lynette B. Corbeil
Group Art Unit	1645
Examiner Name	Albert Mark Navarro
Attorney Docket Number	041673-2048

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**U.S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			
	A1	4,981,685		Healey	01-01-1991	
	A2	6,100,066		Potter	08-08-2000	

**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document			Name of Patentee or Applicant of Cited Documents	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>6</sup>
	A3	Briggs et al., "Characterization of a restriction endonuclease, <i>Phal</i> , from <i>Pasteurella haemolytica</i> serotype A1 and protection of heterologous DNA by a cloned <i>Phal</i> methyltransferase gene." <i>Appl. Environ. Microbiol.</i> 60:2006-2010 (1994)	
	A4	Cole et al., "Two linked genes for outer membrane proteins are absent in four non-disease strains of <i>Haemophilus somnus</i> ." <i>Mol. Microbiol.</i> 6:1895-1902 (1992)	
	A5	Corbeil et al., "Antigenic specificity of convalescent serum from cattle with <i>Haemophilus somnus</i> -induced experimental abortion.." <i>Infection and Immunity</i> , 55:1381-1386, (1987)	
	A6	Corbeil et al., "Characterization of immunodominant surface antigens of <i>Haemophilus somnus</i> ." <i>Infect. Immun.</i> 59:4295-4301 (1991)	

 Examiner  
Signature

 Date  
Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

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Substitute for form 1449B/PTO		<b>Complete if Known</b>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> (use as many sheets as necessary) Sheet 2 of 3		Application Number	09/787,964
		Filing Date	09/25/1999
		First Named Inventor	Lynette B. Corbeil
		Group Art Unit	1645
		Examiner Name	Albert Mark Navarro
		Attorney Docket Number	041673-2048

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	A7	Corbeil et al., <i>Hemophilus somnus</i> Immunoglobulin binding proteins and surface fibrils. <i>Infect. Immun.</i> 65:4250-4257 (1997)	
	A8	Corbeil et al., Serum susceptibility of <i>Haemophilus somnus</i> from bovine clinical cases and carriers." <i>Journal of Clinical Microbiology</i> , 22:192-198, (1985).	
	A9	Ellis and Yong, "Systemic adverse reactions in young Simmental calves following administration of a combination vaccine." <i>Can. Vet.</i> 38:450-47, (1997)	
	A10	Gogolewski et al., "Experimental <i>Haemophilus somnus</i> pneumonia in calves and immunoperoxidase localization of bacteria." <i>Vet. Pathol.</i> , 24:250-256, (1987).	
	A11	Gogolewski et al., "Protective ability and specificity of convalescent serum from calves with <i>Haemophilus somnus</i> pneumonia." <i>Infect. Immun.</i> 55:1403-1411, (1987)	
	<input checked="" type="checkbox"/> A12	Gogolewski et al., "Protective ability of antibodies against 78- and 40-Kilodalton outer membrane antigens of <i>Haemophilus somnus</i> ." <i>Infection and Immunity</i> 56: 2307-2316, (1988).	
	A13	Gogolewski et al., "Pulmonary persistence of <i>Haemophilus somnus</i> in the presence of specific antibody." <i>J. Clin. Microbiol.</i> 27:1767-1774, (1988)	
	A14	Gu et al., "Quantitation and biological properties of released and cell-bound lipooligosaccharides from nontypeable <i>Haemophilus influenzae</i> ." <i>Infect. Immun.</i> 63:4115-4220, (1995).	
	A15	Harris and Janzen, "The <i>Haemophilus somnus</i> disease complex (Hemophilosis): A review." <i>Can. Vet. J.</i> 30:816-822, (1989)	

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<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> (use as many sheets as necessary) Sheet <u>1</u> of <u>3</u>		<b>Application Number</b>	09/787,964
		<b>Filing Date</b>	09/25/1999
		<b>First Named Inventor</b>	Lynette B. Corbeil
		<b>Group Art Unit</b>	1645
		<b>Examiner Name</b>	Albert Mark Navarro
		<b>Attorney Docket Number</b>	041673-2048

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	A16	Inzana et al., "Phenotypic phase variation in <i>Haemophilus somnus</i> lipooligosaccharide during bovine pneumonia and after in vitro passage." <i>Infect. Immun.</i> 60:2943-2951, (1992).	
	A17	Van Donkersgoed et al., "The effect of a combined <i>Pasteurella haemolytica</i> and <i>Haemophilus somnus</i> vaccine and a modified-live bovine respiratory syncytial virus vaccine against enzootic pneumonia in young beef calves." <i>Can. Vet. J.</i> 35:239-241, (1994).	
	A18	Widders et al., "Experimental abortion and the systemic immune response to <i>Haemophilus somnus</i> in cattle." <i>Infection and Immunity</i> , 54:555-560, (1986).	
	A19	Yang et al., "Apoptosis: A possible tactic of <i>Haemophilus somnus</i> for evasion of killing by bovine neutrophils?" <i>Microbiol Pathogenesis</i> , 24:351-159, (1998).	

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